

October 2024

## **The Rising Palate: Exploring the Nuances of Wine Made from Hybrid Grapes**

By: K. Constantino, J. Kelly, & P. Rand

### **Abstract**

This article delves into the realm of hybrid grape varieties in the context of wine production, examining their genetic origins, viticultural attributes, and the resulting enological expressions. By reviewing scientific research, historical context, and contemporary winemaking practices, this study provides an insightful analysis of the burgeoning significance of hybrid grapes in the world of viticulture. Through an exploration of key hybrid varieties, their unique characteristics, and their impact on the wine industry, this article aims to shed light on the growing recognition and appreciation of these wines.

### **Introduction**

The world of wine has undergone transformative changes over centuries, evolving from traditional practices to embrace innovation in grapevine breeding and winemaking techniques. Hybrid grape varieties, which combine the genetic traits of both *Vitis vinifera* and other *Vitis* species, have emerged as a fascinating field of study within viticulture and enology. These hybrid grapes offer winemakers the potential to create wines that combine the desirable attributes of both traditional and disease-resistant varieties. This article examines the origins, viticultural characteristics, winemaking considerations, and market dynamics surrounding wine made from hybrid grapes.

### **Genetic Origins and Varietal Composition**

Hybrid grapes are the offspring of crosses between *Vitis vinifera* and other *Vitis* species, often American varieties like *Vitis labrusca* and *Vitis riparia*. These crosses result in new grape varieties with a diverse array of genetic traits, including enhanced disease resistance, adapted cold tolerance, and modified flavors. Notable hybrid grape varieties include Chambourcin, Seyval Blanc, and Vidal Blanc, each offering unique qualities that contribute to their appeal in the wine world.

### **Viticultural Attributes**

The viticultural attributes of hybrid grape varieties play a crucial role in their success. These attributes include disease resistance, which reduces the need for pesticides and contributes to sustainability in vineyard management. Cold tolerance is another valuable trait, allowing hybrid grapes to thrive in regions with challenging climates where traditional *Vitis vinifera* varieties

may struggle. Furthermore, hybrid vines often have vigorous growth patterns, ensuring a reliable yield even under less-than-ideal conditions.

### Enological Expressions

The winemaking process for hybrid grape varieties involves careful consideration of their unique characteristics. These varietals can exhibit a range of flavors, aromas, and structures that distinguish them from traditional *Vitis vinifera* wines. Winemakers often adapt their techniques to highlight the best qualities of each hybrid grape, resulting in wines that can be remarkably diverse in style. Hybrid wines may showcase characteristics such as fruity aromatics, crisp acidity, and vibrant flavors that appeal to a broad spectrum of consumer palates.

### Historical Context and Modern Relevance

Hybrid grape breeding has a rich history dating back to the late 19th century, driven by the need to combat the devastating effects of phylloxera and other vineyard pests. Early hybrid varieties were developed with an emphasis on disease resistance, often at the expense of flavor and aroma. However, advancements in breeding techniques and a growing demand for sustainable viticulture have propelled hybrid grapes back into the spotlight. Modern hybrids are increasingly celebrated for their balanced attributes and unique terroir expressions.

### Challenges and Opportunities

While hybrid grapes offer a multitude of benefits, they are not without challenges. Some critics argue that hybrid wines lack the complexity and depth of traditional *Vitis vinifera* wines, asserting that the flavors may be overly fruity or lack the aging potential of their counterparts. Additionally, there can be regulatory obstacles to labeling and marketing hybrid wines, as some wine regions have stringent regulations governing varietal labeling.

### Market Dynamics and Consumer Perception

The market for hybrid wines has evolved as consumer preferences shift towards sustainable and locally produced products. Many consumers are intrigued by the idea of wines made from grapes that can thrive without extensive chemical interventions, aligning with a broader movement towards eco-conscious consumption. As awareness of hybrid grapes grows, winemakers have the opportunity to educate consumers about the unique attributes and flavors of these varietals, potentially expanding their market share.

### Conclusion

Hybrid grape varietals represent a dynamic and evolving segment of the wine industry. With their genetic origins rooted in the pursuit of resilience and sustainability, hybrid grapes have evolved into a diverse array of cultivars with unique enological expressions. As winemakers continue to refine their techniques and consumers embrace the concept of hybrid wines, this category has the potential to make a significant impact on the world of viticulture and enology.

The intersection of tradition, innovation, and sustainability embodied by hybrid grape wines is poised to shape the future of the wine industry in intriguing and flavorful ways.

## References

1. Hall, C.M.; Mitchell, R.D. The tourist terroir of New Zealand wine: The importance of region in the wine tourism experience. In *Food and Environment: Geographies of Taste*; Società Geografica Italiana: Roma, Italy, 2002; pp. 69–91.
2. Orth, U.R.; Stöckl, A.; Veale, R.; Brouard, J.; Cavicchi, A.; Faraoni, M.; Santini, C. Using attribution theory to explain tourists' attachments to place-based brands. *J. Bus. Res.* 2012, 65, 1321–1327.
3. Poitras, L.; Getz, D. Sustainable wine tourism: The host community perspective. *J. Sustain. Tour.* 2006, 14, 425–448.
4. Lane, B. What is rural tourism? *J. Sustain. Tour.* 1994, 2, 7–21.
5. Williams, P.W.; Dossa, K.B. Non-resident wine tourist markets: Implications for British Columbia's emerging wine tourism industry. *J. Travel Tour. Mark.* 2003, 14, 1–34.
6. Getz, D.; Jamal, T.B. The environment-community symbiosis: A case for collaborative tourism planning. *J. Sustain. Tour.* 1994, 2, 152–173.
7. Hede, A.M. Food and wine festivals: Stakeholders. Long-term outcomes and strategies for success. In *Food and Wine Festivals and Events around the World: Development, Management and Markets*; Hall, C.M., Sharples, L., Eds.; Butterworth Heinemann: Oxford, UK, 2008; pp. 8–101.
8. McCole, D. T., Holecek, D. & Popp, A (2014). Research update: Understanding the travel behaviors of wine tourists in Michigan's Leelanau Peninsula. *The Northern Grapes News*, 3 (3), pp. 3-6.
9. Getz, D. *Explore Wine Tourism: Management, Development & Destinations*; Cognizant Communication Corporation: New York, NY, USA, 2000.
10. Gabzdylowa, B.; Raffensperger, J.F.; Castka, P. Sustainability in the New Zealand wine industry: Drivers, stakeholders and practices. *J. Clean. Prod.* 2009, 17, 992–998.
11. Santini, C.; Cavicchi, A.; Casini, L. Sustainability in the wine industry: Key questions and research trends *Agric. Food Econ.* 2013, 1, 1.
12. Gilinsky, A., Jr. *Crafting Sustainable Wine Businesses: Concepts and Cases*; Springer: Berlin, Germany, 2015.
13. Maleté, L., McCole, D., Tshepang, T., Ocansey, R., Mphela, T., Maro, C., Adamba, C., and Kazi, J. (2019). Effects of a multiport-sport PYD intervention program on life skills and entrepreneurship in youth athletes. *Journal of Sport & Exercise Psychology*, 41(1), 77-88.
14. Gilinsky, A.; Newton, S.; Atkin, T.; Santini, C.; Cavicchi, A.; Casas, A.; Huertas, R. Perceived efficacy of sustainability strategies in the US, Italian, and Spanish wine industries. *Int. J. Wine Bus. Res.* 2015, 27, 164–181.
15. Marshall, R.S.; Cordano, M.; Silverman, M. Exploring individual and institutional drivers of proactive environmentalism in the US wine industry. *Bus. Strategy Environ.* 2005, 14, 92–109.
16. Frechtling, D. *Forecasting Tourism Demand*; Routledge: London, UK; New York, NY, USA, 2012.
17. Barber, N.; Taylor, D.C.; Deale, C.S. Wine tourism, environmental concerns, and purchase intention. *J. Travel Tour. Mark.* 2010, 27, 146–165.
18. Ocansey, R. T. A., Nyawornota, V. K., Adamba, C., Tay, D. A., Musah, K., Nyanyofio, O. C. N., & McCole, D.T. (2023). Promoting development of entrepreneurial skills of youth in Ghana through a structured sport intervention program. *Frontiers in Education*, 11, 1135084.
19. Ignatow, G. Cultural models of nature and society reconsidering environmental attitudes and concern. *Environ. Behav.* 2006, 38, 441–461.
20. Szolnoki, G.; Bosman, J.; Samara, O.; Iselbarn, M.; Ferrigato, A.; Tari, K.; Gálvez Egea, N. A cross-cultural comparison of sustainability in the wine industry. In *Proceedings of the 6th AWBR International Conference*, Bordeaux Management School, Bordeaux, France, 9–10 June 2011.
21. Forbes, S.L.; Cohen, D.A.; Cullen, R.; Wratten, S.D.; Fountain, J. Consumer attitudes regarding environmentally sustainable wine: An exploratory study of the New Zealand marketplace. *J. Clean. Prod.* 2009, 17, 1195–1199.
22. McCole, D. T., Maleté, L., Tshepang, T., Ocansey, R., Mphela, T., Maro, C., Adamba, C., and Kazi, J. (2022). Can youth sport spark job creation in Africa? Using a sport-based intervention to nurture future entrepreneurs. *Gateways: International Journal of Community Research and Engagement*, 15(2).
23. Hall, C.M. Biosecurity and wine tourism. *Tour. Manag.* 2005, 26, 931–938.
24. Gammack, J.G. Wine tourism and sustainable development in regional Australia. In *Global Wine Tourism, Research, Management and Marketing*; Carlsen, J., Charters, S., Eds.; CABI: Wallingford Oxon, UK, 2006; pp. 59–66.
25. Hall, C.M. Rural wine and food tourism cluster and network development. In *Rural Tourism and Sustainable Business*; Hall, D.R., Kirkpatrick, I., Mitchell, M., Eds.; Channel View Publications: Bristol, UK, 2005; pp. 149–164.
26. Grimstad, S.; Burgess, J. Environmental sustainability and competitive advantage in a wine tourism micro-cluster. *Manag. Res. Rev.* 2014, 37, 553–573. *Sustainability* 2017, 9, 113 11 of 11
27. Alant, K. and Bruwer, J. (2004), "Wine tourism behaviour in the context of a motivational framework for wine regions and cellar doors", *Journal of Wine Research*, Vol. 15 No. 1, pp. 27-37.

28. Popp, L. (2013). Understanding the Push and Push Motivations and itinerary Patterns of Wine Tourists. Master dissertation. Michigan State University. Retrieved from [https://d.lib.msu.edu/islandora/object/etd:550/datastream/OBJ/download/UNDERSTANDING\\_THE\\_PUSH\\_AND\\_PULL\\_MOTIVATIONS\\_AND\\_ITINERARY\\_PATTERNS\\_OF\\_WINE\\_TOURISTS.pdf](https://d.lib.msu.edu/islandora/object/etd:550/datastream/OBJ/download/UNDERSTANDING_THE_PUSH_AND_PULL_MOTIVATIONS_AND_ITINERARY_PATTERNS_OF_WINE_TOURISTS.pdf)
29. Ali-Knight, J. and Carlsen, J. (2003), "An exploration of the use of 'extraordinary' experiences in wine tourism", in Lockshin, L. and Rungie, C. (Eds), Proceedings of the International Colloquium in Wine Marketing, Wine Marketing Group, University of South Australia, Adelaide, Australia.
30. McCole, D. T., Holecek, D., Eustice, C., & Lee, J., (2018). Understanding wine tourists in emerging wine regions: An examination of tasting room visitors in the Great Lakes region of the U.S. *Tourism Review International*, 22(2), 153-168. DOI: 10.3727/154427218X15319286372306
31. Álvarez-García, J., Durán-Sánchez, A., Río-Rama, D. and De la Cruz, M. (2018), "Scientific coverage in community-based tourism: sustainable tourism and strategy for social development", *Sustainability*, Vol. 10 No. 4, p. 1158.
32. Amarando, M., Assenov, I. and Visuthimajarn, P. (2019), "A systematic review of sustainable wine tourism research in Asia 2000–2018", *African Journal of Hospitality, Tourism and Leisure*, Vol. 8 No. 4, pp. 1-24.
33. Andelić, S., Garabinović, D. and Šormaz, G. (2019), "A review of wine and wine tourism presence in the scientific papers in journals in the field of tourism", *Ekonomika Poljoprivrede*, Vol. 66 No. 4, pp. 1055-1090.
34. Arnould, E.J., Price, L. and Zinkhan, G.M. (2002), *Consumers*, McGraw-Hill, Boston.
35. Axelsen, M. and Swan, T. (2010), "Designing festival experiences to influence visitor perceptions: the case of a wine and food festival", *Journal of Travel Research*, Vol. 49 No. 4, pp. 436-450.
36. McCole, D. T., Holecek, D. & Popp, A (2016). Travel behaviors of wine tourists in Michigan's Leelanau Peninsula. [https://www.canr.msu.edu/grapes/wine\\_tourism/travel-behaviors-of-wine-tourists-in-michigan-s-leelanau-peninsula](https://www.canr.msu.edu/grapes/wine_tourism/travel-behaviors-of-wine-tourists-in-michigan-s-leelanau-peninsula)
37. Brochado, A., Stoleriu, O. and Lupu, C. (2021), "Wine tourism: a multisensory experience", *Current Issues in Tourism*, Vol. 24 No. 5, pp. 597-615.
38. Brochado, A., Troilo, M., Rodrigues, H. and Oliveira-Brochado, F. (2020), "Dimensions of wine hotel experiences shared online", *International Journal of Wine Business Research*, Vol. 32 No. 1, pp. 59-77, doi: 10.1108/IJWBR-12-2018-007.
39. Lee, J. -H., McCole, D., Holecek, D. (2020). Exploring winery visitors in the emerging wine regions of the north central United States. *Sustainability*, 12(4), 1642. DOI: 10.3390/su12041642
40. Brown, G.P., Havitz, M.E. and Getz, D. (2007), "Relationship between wine involvement and wine-related travel", *Journal of Travel and Tourism Marketing*, Vol. 21 No. 1, pp. 31-46.
41. Lee, J. & McCole, D. (2016). Understanding Winery Visitors. Paper presented at the *Travel and Tourism Research Association International Conference*. Vail, CO. June 15, 2016.
42. Bruwer, J. (2003), "South African wine routes: some perspectives on the wine tourism industry's structural dimensions and wine tourism product", *Tourism Management*, Vol. 24 No. 4, pp. 423-435.
43. Bruwer, J. and Alant, K. (2009), "The hedonic nature of wine tourism consumption: an experiential view", *International Journal of Wine Business Research*, Vol. 21 No. 3, pp. 235-257, doi: 10.1108/17511060910985962.
44. Bruwer, J. and Lesschaeve, I. (2012), "Wine tourists' destination region brand image perception and antecedents: conceptualization of a WINESCAPE framework", *Journal of Travel and Tourism Marketing*, Vol. 29 No. 7, pp. 611-628.
45. Bruwer, J., Lesschaeve, I. and Campbell, B.L. (2012), "Consumption dynamics and demographics of Canadian wine consumers: retailing insights from the tasting room channel", *Journal of Retailing and Consumer Services*, Vol. 19 No. 1, pp. 45-58.
46. Bruwer, J., Coode, M., Saliba, A. and Herbst, F. (2013), "Wine tourism experience effects of the tasting room on consumer brand loyalty", *Tourism Analysis*, Vol. 18 No. 4, pp. 399-414.
47. Bruwer, J., Pratt, M.A., Saliba, A. and Hirche, M. (2017), "Regional destination image perception of tourists within a WINESCAPE context", *Current Issues in Tourism*, Vol. 20 No. 2, pp. 157-177.
48. McCole, D.T. (2022) Hybrid wine grapes and emerging wine tourism regions. In Dixit, S. K. (ed.), *The Routledge Handbook of Wine Tourism*, 603-613. London: Routledge. ISBN: 9780367698607
49. Byrd, E.T., Canziani, B., Hsieh, Y.C.J., Debbage, K. and Sonmez, S. (2016), "Wine tourism: motivating visitors through core and supplementary services", *Tourism Management*, Vol. 52, pp. 19-29.
50. Cambourne, B. and Macionis, N. (2000), "Meeting the wine maker: wine tourism product development in an emerging wine region", in Hall, C.M., Sharples, L., Cambourne, B. and Macionis, N. (Eds), *Wine Tourism around the World: Development, Management and Markets*, Elsevier, Oxford, pp. 81-101.
51. Gomez, M., Lopez, C. and Molina, A. (2015), "A model of tourism destination brand equity: the case of wine tourism destinations in Spain", *Tourism Management*, Vol. 51, pp. 210-222.
52. Holecek, D., & McCole, D. T. (2015). Who are the consumers of cold-climate wines. Cornell University, *The Northern Grapes News*. Available at <https://ecommons.cornell.edu/bitstream/handle/1813/110104/2013-14-Y3-NB-Obj4-Consumers-Of-Cold-Climate-Wines.pdf?sequence=1>
53. Gómez, M., Pratt, M.A. and Molina, A. (2019), "Wine tourism research: a systematic review of 20 vintages from 1995 to 2014", *Current Issues in Tourism*, Vol. 22 No. 18, pp. 2211-2249.
54. Granda-Orive, J.I., Alonso-Arroyo, A., García-Río, F., Solano-Reina, S., Jiménez-Ruiz, C.A. and Aleixandre-Benavent, R. (2013), "Ciertas ventajas de Scopus en Web of Science en un análisis bibliométrico sobre tabaquismo", *Revista Española de Documentación Científica*, Vol. 36 No. 2, pp. 1-9.
55. Haller, C., Hess-Misslin, I. and Mereaux, J.P. (2020), "Aesthetics and conviviality as key factors in a successful wine tourism experience", *International Journal of Wine Business Research*, Vol. 21 No. 16, pp. 1830-1892.

56. Hashimoto, A. and Telfer, D.J. (2003), "Positioning an emerging wine route in the Niagara region: understanding the wine tourism market and its implications for marketing", *Journal of Travel and Tourism Marketing*, Vol. 14 Nos 3/4, pp. 61-76.
57. Haverila, M., Haverila, K. and Arora, M. (2019), "Comparing the service experience of satisfied and non-satisfied customers in the context of wine tasting rooms using the SERVQUAL model", *International Journal of Wine Business Research*, Vol. 32 No. 2, pp. 301-324.
58. Heatherly, M., Dein, M., Munafo, J.P. and Luckett, C.R. (2019), "Crossmodal correspondence between color, shapes, and wine odors", *Food Quality and Preference*, Vol. 71, pp. 395-405.
59. Hosseini, S., Cortes Macias, R. and Almeida Garcia, F. (2021), "Memorable tourism experience research: a systematic review of the literature", *Tourism Recreation Research*, pp. 1-15.
60. Jeong, Y.K., Song, M. and Ding, Y. (2014), "Content-based author co-citation analysis", *Journal of Informetrics*, Vol. 8 No. 1, pp. 197-211.
61. McCole, D. T., Bobilya, A., Holman, T., Lindley, B. (2019). Benefits of summer camp: What do parents value? *Journal of Outdoor Recreation, Education and Leadership*, 11, 239-247.
62. Kim, H. and Bonn, M.A. (2016), "Authenticity: do tourist perceptions of winery experiences affect behavioral intentions?", *International Journal of Contemporary Hospitality Management*, Vol. 28 No. 4, pp. 839-859.
63. Kim, H. and So, K.K.F. (2022), "Two decades of customer experience research in hospitality and tourism: a bibliometric analysis and thematic content analysis", *International Journal of Hospitality Management*, Vol. 100, p. 103082.
64. Kim, J.H., Ritchie, J.R. and Tung, V.W.S. (2010), "The effect of memorable experience on behavioral intentions in tourism: A structural equation modeling approach", *Tourism Analysis*, Vol. 15 No. 6, pp. 637-648.
65. Kim, J.H., Ritchie, J.B. and McCormick, B. (2012), "Development of a scale to measure memorable tourism experiences", *Journal of Travel Research*, Vol. 51 No. 1, pp. 12-25.
66. Köseoglu, M.A., Schitoglu, Y. and Parnell, J.A. (2015), "A bibliometric analysis of scholarly work in leading tourism and hospitality journals: the case of Turkey", *Anatolia*, Vol. 26 No. 3, pp. 359-371.
67. Kotur, A.S. (2022), "Exploring the wellness dimensions of wine tourism experiences: a netnographic approach", *International Journal of Wine Business Research*, Vol. 34 No. 4, pp. 608-626.
68. Lashley, C. (2009), "Marketing hospitality and tourism experiences", in Oh, H. (Ed.), *Handbook of Hospitality Marketing Management*, Routledge, pp. 25-53.
69. Lee, H., Jung, T.H., Tom Dieck, M.C. and Chung, N. (2020), "Experiencing immersive virtual reality in museums", *Information and Management*, Vol. 57 No. 5, p. 103229.
70. Holecek, D., McCole, D. T., & Lee, J. (2016). Tasting Room Visitor Surveys: Experience with and Enjoyment of Cold-Hardy Wines. *The Northern Grapes News*, 5(2).
71. Leung, D., Law, R., Van Hoof, H. and Buhalis, D. (2013), "Social media in tourism and hospitality: a literature review", *Journal of Travel and Tourism Marketing*, Vol. 30 Nos 1/2, pp. 3-22.
72. Lockshin, L. and Spawton, T. (2001), "Using involvement and brand equity to develop a wine tourism strategy", *International Journal of Wine Marketing*, Vol. 13 No. 1, pp. 72-81.